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Bacterial Adhesion-force Sensing in Oral Biofilms

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Stellingen

1. Initial colonizers dominate development of emergent properties in oral biofilm (**Chapter 1**).
2. Re-scaling of signal intensity distributions in OCT-images significantly enhances the possibilities of biofilm imaging using OCT (**Chapter 2**).
3. Adhesion force sensitivity of genes defines the degree up to which expression of different genes in adhering bacteria is controlled by the environmental adhesion forces they experience (**Chapter 3**).
4. Emergent properties in mono-species *Streptococcus mutans* biofilms depend on the adhesion forces that streptococci sense (**Chapter 3**).
5. Adhesion force sensing by *Streptococcus mutans* is extended to bacteria not in direct contact with a surface through quorum sensing (**Chapter 3**).
6. *Streptococcus oralis* clears the way through a salivary conditioning film for direct contact of *Streptococcus mutans* to a substratum surface (**Chapter 4**).
7. At a certain point in time, everything is going to be OK.
8. There is a purpose to everything we do and everyone we ever meet.
9. PhD research is more about training of logical and critical thinking than about publishing papers.
10. If nothing is certain, then everything is possible.
11. The only way is to go on.